

REMARKS

Claims 1-10 are pending in this application. By this Amendment, claim 1 is amended, and claim 10 is added. No new matter is added. Reconsideration of the application is respectfully requested.

Applicants appreciate the courtesies shown to Applicants' representatives by Examiner Poon in the February 3, 2006 personal interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

The Advisory Action refuses the entry of the February 14 Amendment After Final Rejection because "the newly changed limitations of claim 1 appears to have changed the scope of the claimed invention and therefore, would require further considerations and/or search." However, as discussed in the February 14 Amendment After Final Rejection, claim 1 is amended only to provide proper antecedent basis. That is, claim 1 already recites "the image signal input unit" in lines 3-4, and the amendment to claim 1 is only to make the claim language consistent throughout the claim. The amendment corrects a translation error to make the claims consistent with the claims of the Japanese priority document. Therefore, the Amendment does not raise any new issues or narrow the claims. Thus, the patentability of claim 1 is not changed by this Amendment. As such, the refusal of the entry of the February 14 Amendment After Final Rejection is improper. However, as a Request for Continued Examination is filed with this Amendment, entry of the amendment is proper and respectfully requested.

The Office Action rejects claims 1, 2, 6, 8 and 9 under 35 U.S.C. §102(b) over U.S. Patent No. 5,872,869 to Shimizu et al. (Shimizu). This rejection is respectfully traversed.

Claim 1 recites a distribution-type optical signal transmission medium to which the image signal input unit, the first optical signal output unit, the second optical signal output unit, and the optical signal input unit are connected, and which distributes an optical signal

outputted from at least the first optical signal output unit to the image signal input unit and the optical signal input unit, and transmits an optical signal outputted from the second optical signal output unit to the image signal input unit. This feature is shown in Fig. 4, for example.

The Office Action alleges that optical fiber cables that connect an image generation unit 1, a reader 500 and a printer 600, which the Office Action alleges to correspond to the recited second function unit, first function unit and image output unit, respectively, correspond to the distribution-type optical signal transmission medium recited in claim 1.

During the personal interview, the Examiner clarified that the reader 500 of the first system 1 allegedly corresponds to the recited first function unit; the printer 600 of the second system 1 allegedly corresponds to the recited image output unit; the third system 1 allegedly corresponds to the second functional unit; and an optical fiber cable connecting each system allegedly corresponds to the recited distribution-type optical signal transmission medium.

Applicants respectfully asserted that the Examiner is interpreting Shimizu too broadly because each device within a system 1 of Shimizu has a specific function (e.g., the reader 500 for reading data, and the printer 600 for outputting data), and thus a single system 1 by itself is "multifunctional." Thus, only devices within a single "multifunctional" system 1 should be considered.

The Advisory Action states "The examiner don't know why a person would recognize a 'whole' third system 1 allegedly corresponds to a second function unit while only part of a second system 1 (printer 600) to be corresponded to the first function unit." However, in the following paragraph, the Advisory Action clearly states "The examiner has clearly presented that: ... 3) third system 1 allegedly corresponds to a second function unit..." Applicants respectfully submit that the Office Action is confusing as to exactly what part of the third system corresponds to the second function unit.

However, even this interpretation fails to meet all of the features recited in independent claim 1. Shimizu does not teach or suggest that, to transmit an output signal from the reader 500 of the first system 1 to the printer 600 of the second system 1, the output signal must be transmitted through the third system 1. Claim 1 recites a specific way of transmitting input and output optical signals through the second functional unit. All Shimizu teaches, as described at col. 17, line 63-col. 18, line 9, is that a signal can be transmitted from the reader 500 to the printer 600 via an optical fiber network 700. Therefore, the Examiner's allegation of transmitting data through the third system 1 is not based on specific teachings of Shimizu, but must rely on impermissible hindsight knowledge gained from Applicants' specification.

Further, Shimizu does not specifically teach or suggest a distribution-type optical signal transmission medium. As discussed during the interview, the distribution-type optical signal transmission medium distributes an input optical signal to plural locations and comprises a medium, for example, having high light transmissivity, such as sheet PMMA (polymethyl methacrylate). See page 7, lines 13-21 of the specification, for example. In this way, the system can be easily expanded by connecting functional units to be added to the distribution-type optical transmission medium (see page 8, lines 8-10).

The Advisory Action clarifies the Examiner's intension to allege the optical fiber network to correspond network. However, the optical fiber is not a distribution-type optical signal transmission medium. The optical fiber merely transmits a signal from one end to another end. As discussed in the February 13 Amendment After Final Rejection, a person of ordinary skill in the art would recognize a "distribution-type optical signal transmission medium" ,as a whole, as a term of art as described in Applicants' specification, and would not disregard its meaning as required for the Examiner's position.

The Advisory Action states that because a "medium" is "an intervening substance through which something else is transmitted to carried" according to a dictionary definition and because the optical network allows optical signals to be transmitted to carried from one system to other system and vice versa, it is a distribution-type of medium.

However, Applicants respectfully submit that, as described above, the term "distribution-type optical signal transmission medium" is a term of art and must be considered as a whole in light of the disclosure in the specification. The Advisory Action improperly ignores this by taking a definition of the word "medium" to construe the meaning of the entire phrase.

Accordingly, Shimizu does not teach or suggest a distribution-type optical signal transmission medium, as recited in claim 1.

At least for these reasons, claim 1 is patentable over Shimizu.

Claims 2, 6, 8 and 9 are patentable at least for their dependence on claim 1, as well as for the additional features they recite.

As such, at least for the reasons discussed above, Applicants respectfully request withdrawal of the rejection.

The Office Action rejects claims 4, 5 and 7 under 35 U.S.C. §103(a) over Shimizu in view of U.S. Patent No. 5,822,475 to Hirota et al. (Hirota). This rejection is respectfully traversed.

Hirota does not overcome the deficiencies of Shimizu with respect to claim 1. Therefore, the asserted combination of Shimizu and Hirota does not teach each and every feature of claims 4, 5 and 7. Thus, claims 4, 5 and 7 are patentable at least for their dependence on claim 1, as well as for the additional features they recite. Accordingly, withdrawal of the rejection is respectfully requested.

The Office Action rejects claim 3 under 35 U.S.C. §103(a) over Shimizu in view of U.S. Patent No. 6,295,148 to Atlas. This rejection is respectfully traversed.

Atlas does not overcome the deficiencies of Shimizu with respect to claim 1. Therefore, the asserted combination of Shimizu and Atlas does not teach each and every feature of claim 3. Thus, claim 3 is patentable at least for its dependence on claim 1, as well as for the additional features it recites. Accordingly, withdrawal of the rejection is respectfully requested.

New claim 10 recites that the distribution-type optical signal transmission medium has a plurality of input ports and a plurality of output ports, and that an input from one of the plurality of the input ports is transmitted to the plurality of output ports. These features are shown in Fig. 2, for example. Applicants respectfully submit that none of the applied references teaches or suggests these features. In particular, a mere optical fiber, as alleged by the Patent Office to correspond to the distribution-type optical signal transmission medium, does not have a plurality of input and output ports but only has one input port and one output port. Accordingly, claim 10 is allowable at least for its dependence on claim 1, as well as for the additional features they recite.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the application are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Klifton L. Kime
Registration No. 42,733

JAO:KXH/tbh

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OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

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